<u>REMARKS</u>

The above amendment is made in response to the Final Office action of July 19, 2011. The Examiner's reconsideration is respectfully requested in view of the above amendment and the following remarks.

Claims 5-7 have been canceled, without prejudice. Claims 1-4, 9-13, 15 and 17 have been amended, and new claims 19-28 have been added. The present amendment introduces no new matter, as support is found throughout the originally filed specification and claims.

Claims 1-4 and 8-18 and new claims 19-28 are pending in the present application upon entry of the above amendment.

<u>Examiner Interview Summary</u>

Applicant thanks Examiner Khoshnoodi for granting the courtesy of telephone interviews on November 29, 2011, and December 9, 2011. In the telephone interviews the undersigned attorney for Applicant and the Examiner had a discussion on the amendments to the claims proposed by the undersigned. No agreement has been reached during the telephone interviews.

<u>Rejections under 35 U.S.C. 103(a)</u>

Claims 1-4 and 8-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over a combination of prior art references. Claims 1, 4 and 10-12 stand rejected over Taylor et al., U.S. Patent No. 6,278,885 (hereinafter "Taylor") and further in view of Malcolm, U.S. Patent No. 7,146,638 (hereinafter "Malcolm"); claims 2, 3, 8 and 9 stand rejected over Taylor and Malcolm as applied to claims 1 and 4 and further in view of Yadav, U.S. Patent Publication No. 2003/0149887 (hereinafter "Yadav"); and claims 13-18 stand rejected over Taylor, Malcolm and further in view of Kokado, U.S. Pub. No. 2003/0115327 (hereinafter "Kokado").

In the rejections of independent claims 1, 4 and 10, the Examiner has stated that Taylor teaches all the elements of the independent claims, except for the 'internal permitted program storage' of the claimed invention which the Examiner has further stated is taught by Malcolm. Applicant respectfully traverses the rejections, especially, in view of the above amended claims.

Applicant has amended independent claims 1, 4 and 10 to further clarify the subject matters of the claimed invention and include limitations distinct over the cited references in consideration of the Examiner's comments in the telephone interviews. Amended claims 1, 4 and 10 are as follows:

1. A network security system **controlling inbound traffic** by using a firewall, the firewall protecting a corresponding network connection of a computer to a network by setting restrictions on information communicated between networks, comprising:
a port monitoring unit extracting information about a server port, wherein **the server port is designated as a port of a network communication program**;
an internal permitted program storage storing a list of programs permitted by the firewall, wherein the internal permitted program storage adds a program to the list by extracting information about the program for which communication is to be permitted by the firewall; and
a firewall flexible device determining whether the network communication program is registered in the list of programs stored in the internal permitted program storage;
wherein the firewall flexible device **automatically storing** the extracted information about the server port in an internal permitted port storage if the network communication program is registered in the list of programs stored in the internal permitted program storage; and
wherein the firewall flexible device further determines whether a port of a packet of **inbound traffic** matches with the server port and blocks the packet of inbound traffic if the port does not match with the server port.
[emphasis added]

4. A network security method **controlling inbound traffic** by using a firewall, the firewall protecting a corresponding network connection of a computer to a network by setting restrictions on information communicated between networks, comprising:
storing in an internal permitted program storage a list of programs permitted by the firewall;
extracting information about a server port, wherein **the server port is designated as a port of a network communication program**;
determining whether the network communication program is registered in the list of programs stored in the internal permitted program storage;
automatically storing the extracted information about the server port in an internal permitted port storage if the network communication program is registered in the list of programs stored in the internal permitted program storage;
determining whether a port of a packet of **inbound traffic** matches with the server port; and

10

blocking the packet of **inbound traffic** if the port does not match with the server port.

[emphasis added]

10. A computer recordable device for performing a network security method **controlling inbound traffic** by using a firewall, the device storing a program for executing the method, the method comprising:

storing in an internal permitted program storage a list of programs permitted by the firewall;

extracting information about a server port, wherein **the server port is designated as a port of a network communication program**;

determining whether the network communication program is registered in the list of programs stored in the internal permitted program storage;

automatically storing the extracted information about the server port in an internal permitted port storage if the network communication program is registered in the list of programs stored in the internal permitted program storage;

determining whether a port of a packet of **inbound traffic** matches with the server port; and

blocking the packet of **inbound traffic** if the port does not match with the server port.

[emphasis added]

A network security system of the claimed invention is <u>controlling inbound traffic</u> by using a firewall where a <u>server port is designated as a port of a network communication program</u>, the information of the server port is <u>automatically</u> stored in an internal port storage if the network communication program is registered in an internal program storage, and the <u>inbound traffic is blocked</u> if a port of the inbound traffic does not match with the server port. In particular, the firewall of the network security system of the claimed invention operates with respect to the <u>inbound traffic</u> to control the pass or block of a packet of the inbound traffic. In order to do that, the network security system obtains the information of a **server port** which is <u>designated as a port of a network communication program</u> (i.e., a program for which communication to be permitted by the firewall). Once the network communication program is determined to be registered in an internal program storage (i.e., a storage storing a list of programs permitted by the firewall), the information of the server port is **automatically** stored in an internal port storage. The inbound traffic may be passed or blocked based on determination of whether a port of a packet of the inbound traffic matches or does not match with the server port.

11

In contrast, although Taylor and Malcolm disclose obtaining information of a port for their firewall function, the information is obtained about <u>a port associated with a packet of a communication message</u>, which is not comparable with <u>the server port designated as a port of a program for which communication to be permitted by the firewall</u> as required in the claimed invention. In Taylor and Malcolm, the firewall functions based on the determination whether the information of a port of the packet matches with registered data (in Taylor) or access rules (in Malcolm) which are **manually** <u>configured by a system administrator (in Taylor) or a user (in Malcolm)</u>. Applicant submits that Taylor and Malcolm lack teaching or suggestion of <u>obtaining information about a server port that is designated as a port of a network communication program</u>, and <u>automatically storing the information of the server port if the network communication program is registered in a permitted program storage</u>, as recited in claims 1, 4 and 10.

Assuming that the obtaining information of a port of a packet in Taylor and Malcolm would be relating to the determining match of a port of a packet in the claimed invention, the port of a packet in Taylor and Malcolm are not comparable with and teaches away from the sever port of the claimed invention. There is no teaching or suggestion in Taylor and Malcolm, either alone or in combination, of the server port designated as a port of a network communication program and obtaining and automatically storing the information thereof, as recited in claims 1, 4 and 10.

Thus, it is believed that claims 1, 4 and 10 are patentably distinct and non-obvious in view of Taylor and Malcolm, either alone or in combination.

Dependent claims 2, 3, 8, 9 and 11-18 depend from one of the independent claims, and thus include the limitations of the corresponding independent claim. Thus, Taylor and Malcolm, either alone or in combination, fail to render obvious the subject matter of the dependent claims. The Examiner has relied on Yadav and Kokado to make up for the deficiencies of Taylor and Malcolm. Applicant submits that there is no teaching or suggestion either in Yadav and Kokado of anything about the above mentioned features of the claimed invention.

Thus, dependent claims 2, 3, 8, 9 and 11-18 are believed to be allowable for at least the reasons given to independent claims 1, 4 and 10.

Accordingly, Applicant respectfully request Examiner's reconsideration and withdrawal of the rejections on claims 1-4 and 8-18.

New Claims

Applicant has also added new claims 19-28 which include no new matter and are fully supported by the specification and the drawings of the present application. The new claims further define the distinct subject matters of the present invention. The new claims have been carefully written to avoid any questions under 35 U.S.C. §112.

Accordingly, it is believed that the new claims are in condition for allowance.

Conclusion

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicant's attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicant's attorney hereby authorizes that such fee be charged to Deposit Account No. 50-5622.

Respectfully submitted,

Date: December 19, 2011   By: /Jae Y. Park/
                                      JAE Y. PARK
                                      Reg. No.: 62,629
                                      Attorney for applicant
                                      Kile Park Goekjian Reed & McManus PLLC
                                      1200 New Hampshire Avenue NW, Suite 570
                                      Washington, DC 20036
                                      Tel. No.: 202-263-0809